

REMARKS/ARGUMENTS

1) Prior to this amendment, claims 1-38 were pending. All of the claims have been rejected. As a result of this amendment, Claims 1-38 have been canceled, and new claims 39-81 have been added. Support for the amended claims is as follows:

New Claim	Support	New Claim	Support
39	Claim 1, page 6 lines 9-17; page 7, lines 16-20; page 11, lines 1-11, page 16 lines 5-7	61	Claim 19
40	Page 7 lines 12-14	62	Claim 20
41	Page 7 lines 12-14	63	Claim 21
42	Page 3 lines 15-16	64	Claim 22
43	Page 3 lines 15-16	65	Claim 23
44	Claim 1	66	Claim 24
45	Page 7 lines 16-20	67	Claim 25
46	Page 1 line 22 – page 2, line 1	68	Claim 26
47	Claim 2	69	Claim 28
48	Claim 6	70	Claim 4
49	Claim 7	71	Claim 5
50	Claim 8	72	Claim 31
51	Claim 9	73	Claim 1, page 6 lines 9-17; page 7, lines 16-20; page 11, lines 1-11, page 16 lines 5-
52	Claim 10	74	Claim 1, page 6 lines 9-17; page 7, lines 16-20; page 11, lines 1-11, page 16 lines 5-
53	Claim 11	75	Claim 1

New Claim	Support	New Claim	Support
54	Claim 12	76	Claim 1, page 6 lines 9-17; page 7, lines 16-20; page 11, lines 1-11, page 16 lines 5-
55	Claim 13	77	Claim 32
56	Claim 14	78	Claim 33
57	Claim 15	79	Claim 34
58	Claim 16	80	Claim 35
59	Claim 17	81	Claim 37
60	Claim 18		

Amendments made to the claims are for the purpose of clarity.

References made below refer to the paragraph numbering used by the Examiner in the Office Action of July 12, 2006.

Objections

2) In paragraphs 2-4, the Examiner has required drawing amendments based upon the drawings filed with the application. The applicant, however, submitted formal drawings on November 22, 2004. Accordingly, the objections noted in paragraphs 2-4 have been traversed.

3) In paragraph 5, the Examiner objected to the drawings because, according to the Examiner, Figure 4 is not referenced in the applicant's specification. The applicant notes, however, that Figure 4 is expressly referenced at page 10, lines 14 and 15, and from page 29 line 13 to page 31 line 7 (see also paragraphs 0062 and 0140 - 0148 of the published application 2005/0097150). Accordingly, this objection is traversed.

4) In paragraph 9 the Examiner has objected to the title. The applicant has amended the title to be more descriptive. Accordingly, this objection is traversed.

5) In paragraph 10, claims 34 and 35 were objected to as being of improper dependent form. These claims have been cancelled.

Claim Rejections

6) In paragraphs 11-19, claims 1, 2, 3, 5, 6-8, 9 and 12 were rejected as indefinite under 35 U.S.C. 112, second paragraph. These claims have been cancelled.

7) In paragraph 20, claims 29-35 were rejected under 35 U.S.C. 101 as being directed to non-statutory subject matter. These claims have been cancelled.

8) In paragraph 22, the Examiner has rejected Claims 1-16, 24-26 and 28-38 under 35 U.S.C. 102(e) as being anticipated by Vlahos (U.S. Patent Publication 2002/0133504). The claims noted by the Examiner have been cancelled. The claims in their present form define subject matter which is allowable over Vlahos.

The claimed invention of claims 39-74 and 76-81 broadly relates to the treatment of data from different sources by comparison, aggregation and/or linking. An important idea behind the claimed invention is that data should be treated according to content, rather than form. Thus, data are treated intelligently, according to tunable rules so that a useful intermediate combination of information from different sources can be achieved. By analyzing a combination of data in this way, useful global patterns may be discerned and communicated to an analyst. This is achievable, in part, because a record is maintained for respective data, noting where they come from and how they have been treated in cleaning, matching and splitting processes.

More specifically, the claimed invention relates to a method of linking data records from a number of different sources. The purpose of this is to build a virtual data model comprising a map of the links between respective data records while not merging data records. The virtual data model may be used as a tool to produce output data in a number of different forms which are useful to the organization whose data have been processed. A report can be generated, based on the virtual data model, and pertaining to aspects of the data such as the data quality. By not merging data when building the virtual data model it is possible to analyze the links between data records without having to create a centralized data warehouse. In this way the present method relates to a strategy for linking and analyzing

data, as opposed to a process for throughputting and merging data as is known in the prior art.

Vlahos is cited by the Examiner as a method of aggregating and merging data. By contrast, Vlahos does not disclose the presently claimed method of linking data records from a plurality of sources so as to build a virtual data model, wherein data records are not merged. In addition, Vlahos does not disclose the claimed step of matching received data records and building a virtual data model based on the results of the matching. Furthermore, Vlahos does not disclose generating a report based on the matching results which are represented by the virtual data model. For all of these reasons, present claims 29-74 and 76-81 are allowable over Vlahos and this rejection is traversed.

With respect to claims 74 and 75, data records are cleaned so that like can be compared with like between respective data records and an audit trail is maintained of any changes made to the received data in the cleaning step. An output can be generated comprising the cleaned data and the audit trail, or a virtual data model can be created comprising the cleaned data, linkages between the cleaned data, and the audit trail. By maintaining an audit trail of any changes made to the data in the cleaning step the present invention enables an analyst to investigate any anomalies in the data at source level.

The Examiner has cited Vlahos as teaching an audit trail for logging a user's actions (including submitting queries, managing data, executing tasks and viewing results). However, there is no suggestion of how the audit trail in Vlahos is to be used, unlike the present claims 74 and 75. Specifically, Vlahos does not disclose an audit trail for recording any changes made to the data during a step of cleaning the data. Therefore, Vlahos does not disclose the presently claimed step and structure for creating a data set comprising the cleaned data and the audit trail. For these reasons the subject matter of independent claims 74 and 75 is allowable over Vlahos.

10) In paragraph 24, the Examiner has rejected claims 17-23 and 27 under 35 U.S. C. 103(a) as being unpatentable over Vlahos in view of Kuhlman (U.S. Patent Publication 2004/0167897). Kuhlman teaches techniques for searching within fields of a database.

Kuhlman does not teach or suggest or comment on in any way, building a virtual data model comprising a map of the links between respective data records while not merging data records. Therefore, the combination of Kuhlman and Vlahos still does not teach the claim element present in claims 39-74 and 76-81 whereby a virtual data model is created and the current claims are presently in allowable form.

Further, it is doubtful that one of ordinary skill in the art would look to combine the references cited by the Examiner. Indeed the paragraph [0020] cited by the Examiner in Vlahos for providing the motivation to combine does not even discuss database searching, the essential teaching of Kuhlman. Vlahos appears to provide a complete solution to the problem described therein and does not suggest that additional tools for data searching are either necessary or desirable. For this additional reason, the current claims are presently in allowable form.

In conclusion, all of the claims remaining in this application should now be seen to be in condition for allowance. A prompt notice to that effect is respectfully solicited. If there are any remaining questions, the Examiner is requested to contact the undersigned at the number listed below.

Respectfully submitted,

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